

# METHOD AND APPARATUS FOR MOBILE COMMUNICATION UTILIZING LOAD BALANCING

## ABSTRACT

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A method and apparatus are provided for mobile communication utilizing load balancing. When a home agent (HA) consists of one or more servers with each server being assigned a Mobile IPv6 Home-Agents Anycast Address, a nearby  
10 router does not store the link-layer addresses with respect to the Anycast addresses of the servers in its neighbor cache. Consequently, load balancing between or among the servers could not be performed. To solve this problem, in one example, an HA is provided that comprises a representative HA and  
15 distributed HAs. The representative HA is assigned an Anycast Address. The representative HA includes a collecting device configured to collect HA lists and load information from the distributed HAs. The representative HA dynamically creates a HA list and sends the HA list to a mobile node (MN). The MN  
20 registers its current location with an HA from the HA list included in a Home Agent Address Discovery Reply message. The load on the HA can then be shared by the servers constituting the HA.